

BOOKING SYSTEM C



CODE SCANNER

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## **ABSTRACT**

Booking System of ICT Equipment (BSIE) is a web-based system. This system is designed especially for the University Malaysia Pahang community which staff and student of UMP. Before this system being developed, the Booking System of ICT Equipment was integrated with E-Community system and without using barcode scanner. This causes the PTMK staff going through difficulty when the E-Community performances become low. Thus, this system develop to make their operation goes smoothly and can track the quantity equipment available than manually written. Apart from this, this system has reporting function which gives PTMK Staff to filling the daily progress of these activities. Besides this, the PTMK Staff also can download the report either to Excel file or PDF file. This all functions of the system allow the work of PTMK Staff easier.

## ABSTRAK

Booking System of ICT Equipment (BSIE) adalah satu sistem berasaskan web. Sistem ini direka terutama untuk warga Universiti Malaysia Pahang yang melibatkan mahasiswa dan pensyarah. Sebelum sistem ini dibangunkan, Booking System of ICT Equipment (BSIE) berintegrasi dengan sistem E-Community tanpa menggunakan peralatan Barcode Scanner. Hal ini menyebabkan staf PTMK mengalami masalah apabila prestasi sistem E-Community menjadi rendah. Dengan ini, sistem ini dibangunkan untuk membolehkan operasi kerja staf PTMK berjalan dengan lancar dan sekaligus boleh mengesan kuantiti peralatan ICT yang ada daripada tulis secara manual. Di samping itu, sistem ini juga menyediakan fungsi laporan yang membolehkan staf PTMK memfailkan laporan aktiviti harian. Selain itu, staf PTMK juga boleh muat turun laporan tersebut dalam bentuk Excel atau PDF. Dengan fungsi seperti ini, sistem ini memberi laluan kepada staf Ptmk untuk menyiapkan tugas mereka dengan senang.

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## LIST OF ABBREVIATIONS

<b>Abbreviation</b>	<b>Definition</b>
UMP	Universiti Malaysia Pahang
RAD	Rapid Application Development
PTMK	Information Communication And Technology Center
ICT	Information Communication And Technology
BSIE	Booking System of ICT Equipment
SQL	Structured Query Language
PK	Primary Key
FK	Foreign Key

## **Part 1**

### **INTRODUCTION**

In this part, an introduction to scheduling will be presented, followed by the problem statement, the object, the scope of project, literature review of system and comparison on barcode scanner.

#### **1.1 Introduction**

This is system named as Booking System of ICT Equipment using Barcode Scanner. This system is developed for Pusat Teknologi Maklumat Dan Komunikasi (PTMK). The system will be web-based system. The users of the system will be UMP staff and UMP student.

The system requires user to register in order to login to the system. User itself can update their profile, view the available ICT Equipment, booking the equipment's as well as cancel the booking if necessary. Whereas, admin responsibility to approve or reject the user request based on availability of equipment and manage the equipments. Admin also shall borrow the equipment's by scanning the item's serial number as well record the returning of the equipment. Admin can search for user's detail and also view the report of availability equipment's.

The advantages of this Booking System for ICT Equipment:

- i. Can make the admin work easier to track the available of equipment by viewing the report rather than checking manually by calculating.
- ii. Can avoid frustrated on user for waiting long time to borrow the equipment.
- iii. Can avoid the admin work from complex when there's wrong input of serial number.

As a conclusion, this system will be helpful for all UMP users in term of performance level and usability which means satisfaction by users. This system will be hand over to the Pusat Teknologi Maklumat Dan Komunikasi (PTMK).

## **1.2 Problem Statement**

The following is the problem statement that has been encountered in existing system at UMP:

- i. The staff mistakes in entering long serial causes the transaction of borrowing ICT Equipment takes long time.
- ii. The ICT Equipment existing system is integrated and accessible through UMP E-Community thus accessing the existing booking system become problem, if there is performance issue to the main system.
- iii. No real time monitoring system that enables admin from Pusat Teknologi Maklumat Dan Komunikasi (PTMK) to verify the exact quantity of ICT Equipment available.

## **1.3 Objective**

The following is the objective to be applied in the system that being developed:

- I. To integrate the Barcode Scanner in the system development to minimize human error during input process.
- II. To develop a booking system for ICT Equipment without any integration to UMP E-Community.
- III. To implement a real time reporting function of availability on ICT Equipment through report generation.

## **1.4 Scope of Study**

- I. Focus for the user of ICT Equipment Booking System which are UMP Staff and Student.
- II. This system will be developed using ASP.Net platform.
- III. Implement Barcode Scanner to read the serial number (ISBN) of the ICT Equipment during transaction of borrowing the equipment.



## 1.5 Project Organization

In this documentation, there will two highlighted chapter which is Chapter 1 and Chapter2. Chapter 1 is all about introduction for the booking system of ICT Equipment. In Chapter2, there will be the report body which contain use case diagram, sequences diagram, activity diagram, and class diagram. Gantt chart and methodologies that will be used throughout this project also will be described in this documentation.

## 1.6 Review of Existing System

### I. Online Booking Mozaic Restaurant

Mozaic Restaurant provides an online booking of foods for customers. This application is available also in mobile application. This online booking system helps the restaurants to gain more money or revenue and permits them to work efficiently as possible.

For the function available in this Online Booking Mozaic Restaurant. Firstly, users can book the restaurant by select the category of ages, meal service time and the desire booking dates. After that, they will proceed by to select the available time for the meal. And the user need to enter their details information and if they want to request such as prepare cake for birthday party, they can do so in provided special request box. And lastly users will get a booking reference number and if the user want to change anything, they must use the booking number to make a change [1].

Advantages:

- a) Customer can access from anywhere to booking to the restaurants. This application is not only limited to web-based.
- b) Customer can cancel or update the booking by using the booking number that has been send to the customer email.
- c) Customer can booking only on that available time only because this is not 24 hours restaurant.

Limitations:

- a) The system is not user-friendly because the interface is totally dull. The interface is only in white colour.
- b) Customer might difficult to emphasize on the action that the need to perform because there is no clear description on every pages.

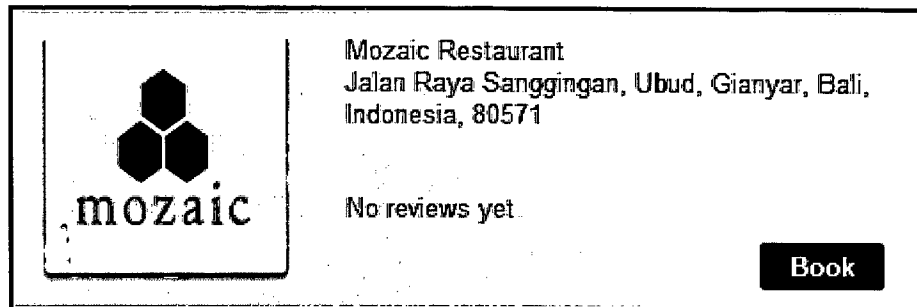


Figure 1.1 Main Page of Booking

**Make a booking**

[New Booking](#) [Edit / Cancel](#)

**Choose Party Size and Service**

**Dinner ▼** **2 ▼**  
 Adults  
 12+

**<** **February 2014** **>**

Mo	Tu	We	Th	Fr	Sa	Su
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28		

[Book Here >](#)

Figure 1.2 Date and Meal Size Booking

New Booking

Edit / Cancel

What time would you like to book?

20:00	20:15	20:30	20:45
21:00	21:15	21:30	

< Back

Figure 1.3 Booking Time Selections

Make a booking

New Booking

Edit / Cancel

Contact Details

Title

First Name

Surname

Mobile

Email

Where are you Staying?

I would like to receive more news and offers from Mozaic Restaurant by

☒ Email
 ☐ Remember me (Privacy Care)

< Back

Continue >

Figure 1.4 Customer Information Page

**Make a booking**

New Booking

Edit / Cancel

**Please check your details**

Name: **Mr. Asd As**  
Email: **asd@yahoo.com.my**  
Date: **25 February 2014**  
Time: **20:00**  
People: **2**

☐ I have read and accept the booking conditions

Special Requests: 

Let us know if you have any special requests and we will do our best to assist. Please note that special requests cannot be

< Back

I Confirm >

Figure 1.5 Booking Confirmation Page

Make a booking

New Booking

Edit / Cancel

**Thank you for choosing Mozaic Restaurant, we look forward to seeing you on 25 February 2014**

Your reservation was successful and a confirmation has been sent to you by email.

Your booking reference number is **BN7N6AK**. You may use this to make online changes to your reservation.

Name: **Asd As**  
Email: **asd@yahoo.com.my**  
Date: **25 February 2014**  
Time: **20:00**  
People: **2**

Share

Tweet

Email

Figure 1.6 Booking Reference Number Details Page

## II. Freebookings Online Restaurant Reservations

The freebookings is the most simplest and easiest online booking software that available to use in most of the restaurants. This online booking system also can deliver the correct restaurants as the user wished such as a simply restaurant but with a high in features. Besides that, the system can acquires the users online and able to take the dinner bookings from website in home computers or an application that available in android Google play for the use in the iPad and smartphones [2].

For this system, customer can choose the time and date even table number for the meal that will be book. The customer can edit the details of booking. The confirmation of the reservation will be sent to the customers email. From email, the customer can check the detail and with the reservation number. If any changes want to be made, the customer can do so, by send the email to the restaurant. For the admin use, they will up-to-date the availability of meal for each day with the food will be prepared for breakfast, lunch and dinner. Besides that, the admin responsible to send the reservation number through email, once the customer reservation approved.

**Advantages:**

- a) No need proprietary hardware which means this system can be access from anywhere. There is no limitation only can be access through computer.
- b) Admin can manage the availability, where admin can set the number of customers to receive for the days. The admin can manage availability many on public holidays.
- c) Customer will have automatic confirmation after they booking for the restaurants. The customer will receive confirmation through their email address with the restaurant customer have been chosen.
- d) Customer can get up-to-date the information about the restaurant events, food available on whole weeks and so on.

**Limitations:**

- a) Admin limit the booking available for each day on different quantities which can make customer satisfaction low.
- b) The usability of the system is moderate because the interface is not user friendly and the efficiency.

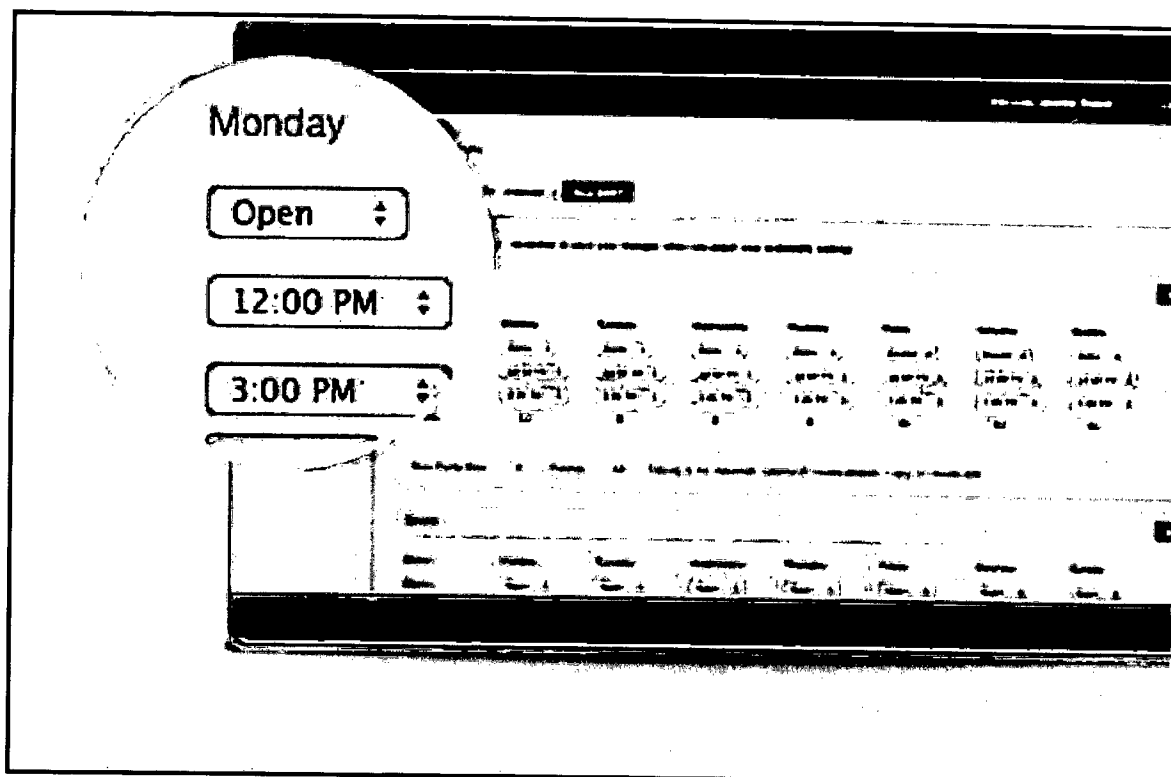


Figure 1.7 Reservation Information Page

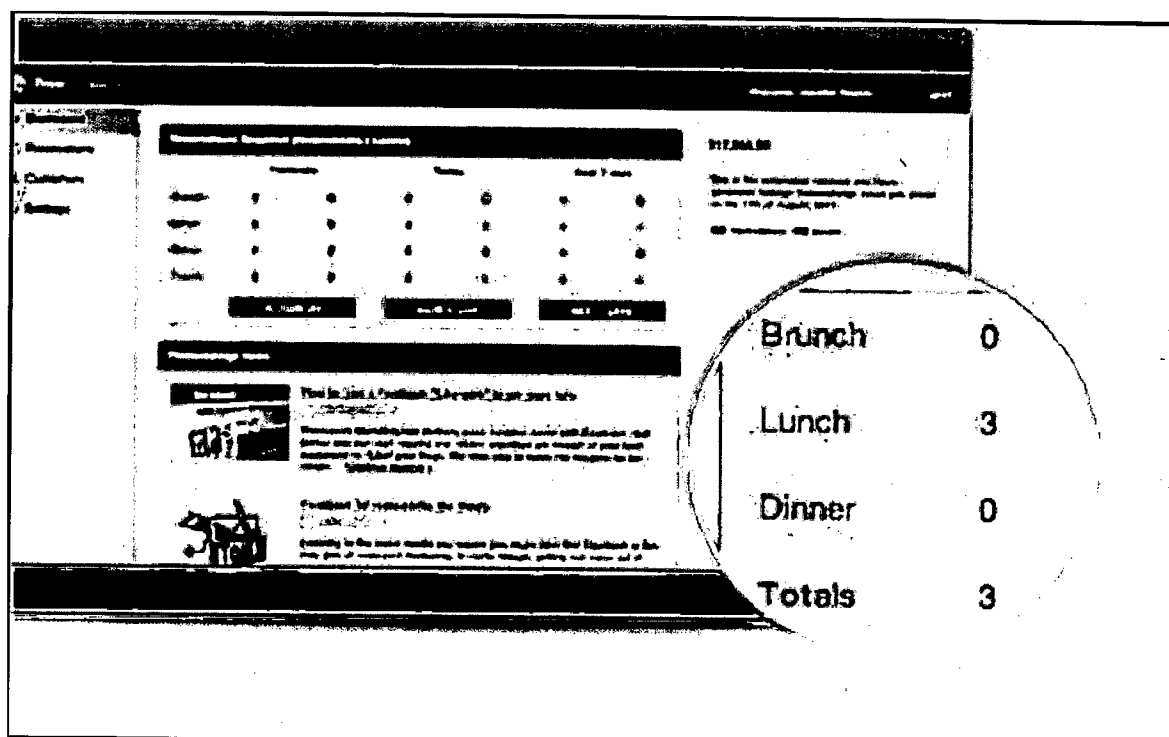


Figure 1.8 Meal Service Availability Details Page